

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Joseph Harris Co., Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'Deep Red'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 25th day of January in the year of our Lord one thousand nine hundred and seventy-nine

Attest:

[Signature]
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

[Signature]
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY <i>Special Prizehead</i>	1b. VARIETY NAME <i>Deep Red</i>	FOR OFFICIAL USE ONLY PV NUMBER 7800086	
2. KIND NAME <i>Leaf (cutting) Lettuce</i>	3. GENUS AND SPECIES NAME <i>Lactuca Sativa</i>	FILING DATE 6-12-78	TIME 10:00 A.M.
4. FAMILY NAME (BOTANICAL) <i>Compositae</i>	5. DATE OF DETERMINATION <i>June 1975</i>	FEE RECEIVED \$ 250.00 \$ 250.00 \$ 250.00	DATE 6-12-78 6-12-78 10-25-78
6. NAME OF APPLICANT(S) <i>Raymond E. Cartasegna</i>	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <i>6820 Southeast Maplehurst Rd. Milwaukie, Oregon 97222</i>	8. TELEPHONE AREA CODE AND NUMBER <i>(503) 654-5089</i>	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) <i>Partnership</i>		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION	11. DATE OF INCORPORATION

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Joseph Harris Co., Inc.
3670 Buffalo Road
Rochester, New York 14624 Phone: *716-594-9411*

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
☒ 13B. Exhibit B, Novelty Statement.
☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
☒ 13D. Exhibit D, Additional Description of the Variety.

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed?
(See Section 83(a). (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations?

☐ YES ☒ NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed?

☐ FOUNDATION☐ REGISTERED☐ CERTIFIED

15. Does the applicant(s) agree to the publication of his/her (their) name(s) and address in the Official Journal?

☒ YES ☐ NO

16. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

X 1/14/78
(DATE)
1/14/78
(DATE)

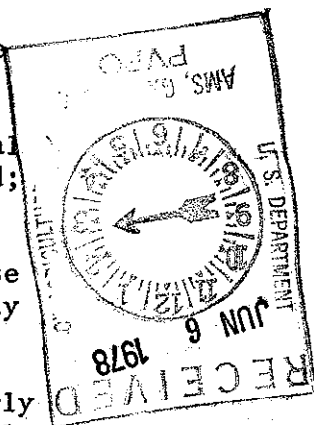
X Raymond E. Cartasegna
(SIGNATURE OF APPLICANT)
Cartasegna Brothers 1
(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



Harris Seeds

MORETON FARM.....
ROCHESTER, N.Y., 14624

TEL. 594-9411.....
or 247-3963.....
Area Code 716.....

EXHIBIT A

'Deep Red' Plant Patent Application

7800086

Origin and Breeding History of the Variety

1. 'Deep Red' originated as a darker, more vigorous offtype from a commercial stock of 'Prizehead'. This segregate was observed in the 1972, 1973 and 1974 crops grown by Cartasegna Brothers. In June of 1974 a single plant selection was made, from which seed was obtained in September.
2. Observations from growing out the progeny of this individual selection indicated that this selection was a distinct pure-line from the original 'Prizehead'. From this point Mass Selection methods were utilized in the development of the variety. In 1975, 1976 and 1977 the progeny from each successive generation were grown out, re-selecting and increasing the stock on the following basis:
 - A. All recurrent light colored plants similar to the original strain of 'Prizehead', plus all in-between shades were rogued out. Only the dark colored plants were selected.
 - B. All Plants, regardless of color that were thin-leaved were rogued out. The selected plants thus having a slightly thicker leaf than the original 'Prizehead'.
 - C. At full maturity selections were made for "open heads", roguing out all butter ball types.
3. Due to the original of this variety, rogueing is required to remove plants with a thin, yellow-green leaf type. The frequency of this off-type is 1:150.
4. The genetic make-up for this variety was homogenous from the first generation. The attached data from our observational field reports, plus the photographs in Exhibit B indicate that this variety has been stabilized for the past two generations.

SPRING 1977

Lettuce Trials @ J. Harris Co., Rochester NY

LETTUCE, SPINACH, MUSTARD, PARSLEY

Rating 1 2 3 4 5 Field No. 16
 Variety Special Prizehead Stock No. 7-833
 Grower & History Cartasegna Bros. from 1976 mass selection Date Sown 5/3/77
 Germination Strong ☒ Good ☐ Fair ☐ Poor ☐ Transplanted ☐
 No. of Days to Maturity 48 Date of Bolting 6/29
 Notes Darker in color than Prizehead and a little larger plant. The green color is dark like Waldmann's Green and Burgandy color is also darker than Prizehead. Blestening & Wavy to leaf edge is like Prizehead with medium size plant. Good uniformity

Use

Similar To Prizehead Rogues 1 lighter green - plt in Repl. cPLANT CHARACTERISTICS - (Small Medium Large) (Upright Slightly-Spreading Spreading)PLANT COLOR - (Light-Green Medium-Green Dark-Green Yellow-Green Other) Dark red marginLEAF CHAR. - (Smooth-Edge Slightly-Wavy-Edge Wavy-Edge Savoyed Semi-Savoyed Smooth)

HEAD CHARACTERISTICS - (Large Medium Small) SOLIDITY - (Firm Moderately-Firm Fair Poor)

PARSLEY ONLY - (Very-Curled Moderately-Curled Slightly-Curled Flat)

F305J

7800086

LETTUCE, SPINACH, MUSTARD, PARSLEY

Rating 1 2 3 4 5 Field No. _____
 Variety _____ Stock No. _____
 Grower & History _____ Date Sown _____
 Germination Strong _____ Good _____ Fair _____ Poor _____ Transplanted _____
 No. of Days to Maturity _____ Date of Bolting _____
 Notes _____

Use

Similar To _____ Rogues _____

PLANT CHARACTERISTICS - (Small Medium Large) (Upright Slightly-Spreading Spreading)

PLANT COLOR - (Light-Green Medium-Green Dark-Green Yellow-Green Other)

LEAF CHAR. - (Smooth-Edge Slightly-Wavy-Edge Wavy-Edge) (Savoyed Semi-Savoyed Smooth)

HEAD CHARACTERISTICS - (Large Medium Small) SOLIDITY - (Firm Moderately-Firm Fair Poor)

PARSLEY ONLY - (Very-Curled Moderately-Curled Slightly-Curled Flat)

F305J

Spring 1978 Lettuce Trials at J. Harris Co., Rochester, N.Y.

LETTUCE, SPINACH, MUSTARD, PARSLEY

Rating 1 2 3 4 5 Field No. 20
Variety Deep Red (Special Prizehead) Stock No. 511-37
Grower & History P.W. (lot #1) most heavily regued from Date Sown 4-28-78
Germination Strong ☒ Good ☐ Fair ☐ Poor ☐ Transplanted ☐
No. of Days to Maturity 48 Date of Bolting 6/27

Notes Slightly larger plant than Prizehead with darker green leaves and darker red pigment than Prizehead. Green color is most like Waldenman's Green. Same leaf blistering and wavy margin as Prizehead. Good uniformity.

Similar To Prizehead Use None
Rogues None

PLANT CHARACTERISTICS - (Small Medium Large) (Upright Slightly-Spreading Spreading)

PLANT COLOR - (Light-Green Medium-Green Dark-Green Yellow-Green Other)

LEAF CHAR. - (Smooth-Edge Slightly-Wavy-Edge Wavy-Edge) (Savoyed Semi-Savoyed Smooth)

HEAD CHARACTERISTICS - (Large Medium Small) SOLIDITY - (Firm Moderately-Firm Fair Poor)

PARSLEY ONLY - (Very-Curled Moderately-Curled Slightly-Curled Flat)

F305J

7800086

LETTUCE, SPINACH, MUSTARD, PARSLEY

Rating 1 2 3 4 5 Field No. 21
Variety Deep Red Stock No. 511-47
Grower & History P.W. lot #2 from Cartasagna stock Date Sown 4-28-78
Germination Strong ☒ Good ☐ Fair ☐ Poor ☐ Transplanted ☐
No. of Days to Maturity 48 Date of Bolting 6/27

Notes like row 20 above, but slightly more variation in plant size

Similar To Prizehead Use None
Rogues 1 light green plant in Original

PLANT CHARACTERISTICS - (Small Medium Large) (Upright Slightly-Spreading Spreading)

PLANT COLOR - (Light-Green Medium-Green Dark-Green Yellow-Green Other) Dark red margin

LEAF CHAR. - (Smooth-Edge Slightly-Wavy-Edge Wavy-Edge Savoyed Semi-Savoyed Smooth)

HEAD CHARACTERISTICS - (Large Medium Small) SOLIDITY - (Firm Moderately-Firm Fair Poor)

PARSLEY ONLY - (Very-Curled Moderately-Curled Slightly-Curled Flat)

F305J

Spring 1978 Lettuce Trials at J. H. Co., Rochester, NY.

LETTUCE, SPINACH, MUSTARD, PARSLEY

Rating 1 2 3 4 5

Field No. 22

Variety Deep Red

Stock No. 511-27

Grower & History Cartasegna from 7-833 (1977 mass selection) Date Sown 4-28-78

Germination Strong ☒ Good ☐ Fair ☐ Poor ☐

Transplanted

No. of Days to Maturity 48

Date of Bolting 6/28

Notes Like rows 20 and 21. Good uniform lot of Deep Red. Slightly smaller plant size than 20 & 21. Similar to Pugshead in size, leaf blistering, and wavy margin.

Use

Similar To Pugshead

Rogues None

PLANT CHARACTERISTICS - (Small Medium Large) (Upright Slightly-Spreading Spreading)

PLANT COLOR - (Light-Green Medium-Green Dark-Green Yellow-Green Other) ☒ Dark red margin

LEAF CHAR. - (Smooth-Edge Slightly-Wavy-Edge Wavy-Edge Savoyed Semi-Savoyed Smooth)

HEAD CHARACTERISTICS - (Large Medium Small) SOLIDITY - (Firm Moderately-Firm Fair Poor)

PARSLEY ONLY - (Very-Curled Moderately-Curled Slightly-Curled Flat)

F305J

780C086

LETTUCE, SPINACH, MUSTARD, PARSLEY

Rating 1 2 3 4 5

Field No.

Variety

Stock No.

Grower & History

Date Sown

Germination Strong ☐ Good ☐ Fair ☐ Poor ☐

Transplanted

No. of Days to Maturity

Date of Bolting

Notes

Use

Similar To

Rogues

PLANT CHARACTERISTICS - (Small Medium Large) (Upright Slightly-Spreading Spreading)

PLANT COLOR - (Light-Green Medium-Green Dark-Green Yellow-Green Other)

LEAF CHAR. - (Smooth-Edge Slightly-Wavy-Edge Wavy-Edge Savoyed Semi-Savoyed Smooth)

HEAD CHARACTERISTICS - (Large Medium Small) SOLIDITY - (Firm Moderately-Firm Fair Poor)

PARSLEY ONLY - (Very-Curled Moderately-Curled Slightly-Curled Flat)

F305J

7800086

JOSEPH HARRIS COMPANY, INC.

Harris Seeds

MORETON FARM.....
ROCHESTER, N.Y., 14624

TEL. 594-9411.....
or 247-3963.....
Area Code 716.....

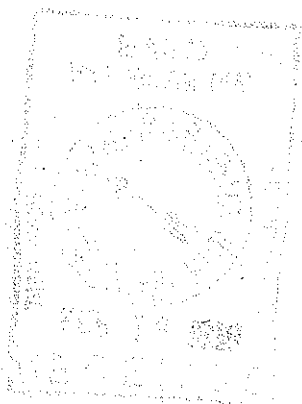
EXHIBIT B

'Deep Red' Plant Patent Application

Novelty Statement

'Deep Red' is a leaf lettuce most closely resembling 'Prizehead', but it is distinctive in color. The background color of the leaf is a much darker shade of green than 'Prizehead'. The anthocyanin pigment distribution and color are similar to 'Prizehead', but of a darker hue in 'Deep Red'. Photographs 1 and 2 are attached as evidence of the color distinction. Further objective color evaluation is submitted in Exhibit D.

'Deep Red' is also distinctive in having a thicker leaf than that of 'Prizehead'. The average thickness of a mature fully expanded leaf of 'Deep Red' is 0.36 mm (ranging from 0.45 to 0.30), while the average thickness of a leaf of 'Prizehead' measured at the same stage of development is 0.21 mm (ranging from 0.25 to 0.17 mm). This difference was found to be significant at $P = .01$. Photograph #3 further documents the difference in leaf thickness.



OBJECTIVE DESCRIPTION OF VARIETY
(LETTUCE)

INSTRUCTIONS: See reverse.

NAME OF APPLICANT(S)

Raymond E. Cartagena

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

6820 Southeast Maplehurst Road
Milwaukie, Oregon 97222

FOR OFFICIAL USE ONLY

PVFO NUMBER

7800086

297 - 1 -

VARIETY NAME OR TEMPORARY
DESIGNATION

DEEP RED

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. PLANT TYPE:

10 = CUTTING (Leaf)

20 = STALK

50 = BUTTERHEAD

60 = LATIN

70 = OTHER (Specify)

30 = COS

31 = SELF-CLOSING
GROUP32 = LOOSE-CLOSING
GROUP

40 = CRISPHEAD

41 = IMPERIAL GROUP

42 = GREAT LAKES GROUP

43 = VANGUARD

44 = NEW YORK GROUP

2. SEED COLOR:

1 = WHITE

2 = BLACK

3 = YELLOW

3. ANTHOCYANIN:

1 = ABSENT

2 = PRESENT

4. LEAF CONTAINING ANTHOCYANIN:

1 = COVERED

2 = SPOTTED

3 = ALONG MARGIN

4 = ABSENT

5 = OTHER (Specify)

Extending to midrib on fully exposed leaves.

5. LEAF SURFACE TEXTURE:

1 = SMOOTH

2 = BLISTERED

6. LEAF SURFACE REFLECTANCE:

1 = DULL

2 = GLOSSY

3 = OTHER (Specify)

7. LEAF MARGIN:

1 = STRAIGHT

2 = WAVY

3 = CURLED

1 = ENTIRE

2 = DENTATE

3 = INCISED

4 = DEEPLY INCISED

5 = OTHER (Specify)

Denticulate

8. LEAF SHAPE:

1 = ROUNDED

2 = POINTED

1 = BROADER
THAN LONG2 = LONGER
THAN BROAD

3 = OTHER (Specify)

9. LEAF COLOR: (See reverse.)

1 = RED

2 = REDDISH-BROWN

3 = YELLOW

4 = YELLOWISH-GREEN

5 = GREYISH-GREEN

6 = BLUE-GREEN

7 = DARK-GREEN

8 = VERY DARK GREEN

Leaf Margin color is (2)

10. HEADS:

1 = SPHERICAL

2 = FLATTENED

3 = ELONGATE

4 = POINTED

5 = NON-HEADING

11. PLANT SIZE: (See reverse.)

1 = SMALL

2 = MEDIUM

3 = LARGE

12. CULTURE:

1 = SUMMER
CROP2 = WINTER
CROP3 = NOT
SPECIFIC4 = UNDER
GLASS

5 = OTHER (Specify)

13. SIZE OF 10-DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 25° C.: (Place a zero in first box (i.e. 0 2) when size is 9 mm. or less.)

mm. LENGTH OF SEEDLING

mm. LENGTH OF COTYLEDON

mm. WIDTH OF COTYLEDON

14. DISEASE RESISTANCE TO: (Enter zeroes in box(es) where there is no special disease resistance.)

1 = TIPBURN

2 = MOSAIC

3 = DAMPING OFF

4 = DOWNY MILDEW

5 = SCLEROTINIA
ROT6 = BROWN
BLIGHT

7 = BIG VEIN

8 = OTHER (Specify)

15. OUTLINE THE FOURTH LEAF: (For standardization purposes, the fourth leaf should be taken from a 20-day old plant grown under constant light.)



16. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER		NAME OF VARIETY				
Leaf color		Imperial 847 or Waldemann's Green in background color.				
Leaf pigmentation		Prizehead in pigment distribution, Ruby in pigment color.				
Leaf shape		Prizehead				
Plant size		Prizehead				
Head size		Non-heading				
VARIETY	NO. OF DAYS TO HEAD MATURITY UNDER WINTER CROPPING	LOCATION	NO. OF DAYS TO HEAD MATURITY UNDER SUMMER CROPPING	LOCATION	NO. OF DAYS TO SEED STALK EMERGENCE UNDER SUMMER CROPPING	LOCATION
Submitted			48	Rochester, N.Y.	60	Rochester,
Similar			48	Rochester, N.Y.	62	Rochester, N
Name of similar variety			Prizehead		Prizehead	

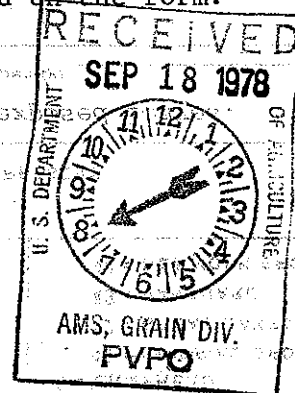
INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. C. M. Rodenburg, 1960, Varieties of Lettuce, An International Monograph, Instituut Voor de Veredeling van Tuinbouwgewassen, Wageningen, Holland.
2. L. L. Morse, 1930, Field Notes on Lettuce, published by Ferry-Morse Seed Co.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following lettuce varieties may be used as a guide to identify the eight colors listed on the form.

Color	Variety
Red	"Salad Trim"
Reddish-brown	"Ruby"
Yellow	"Salad Bowl"
Yellowish-green	"Oakleaf"
Greyish-green	"White Boston"
Bluish-green	"Bibb"
Dark-green	"Imperial" group
Very dark green	"Deer Tongue"



PLANT SIZE: The following varieties may be used as a guide to identify the plant type size:

TYPE	COMPARABLE VARIETIES		
	SMALL	MEDIUM	LARGE
Cutting (leaf)	Boston-Curled	Prize Head	Grand Rapids
Stalk (stem)	Celtuce		
Cos	Express	Parris Island	Giant White
Crisphead	Mignonette	Hanson (Merit)	Climax
Butterhead	Tom Thumb	Big Boston	Mammoth Butter
Latin	Sucrino	Creole	Deer Tongue

JOSEPH HARRIS COMPANY, INC.

Harris Seeds

MORETON FARM.....
ROCHESTER, N.Y., 14624

TEL. 594-9411.....
or 247-3963.....
Area Code 716.....

EXHIBIT D

7800086

'Deep Red' Plant Patent Application

Additional Description of the Variety

'Deep Red' is a cutting (leaf) lettuce most closely resembling 'Prizehead'. The plants have the same non-heading habit as 'Prizehead' with a round leaf, having a blistered surface and a wavy margin like 'Prizehead'. The leaf thickness of 'Deep Red' is thicker than 'Prizehead'. The seed color is white.

'Deep Red' differs most from 'Prizehead' in color. The background leaf color is dark green in 'Deep Red', comparing most similarly with 'Imperial 847' or 'Waldemann's Green'. 'Prizehead' has a yellow background leaf color similar to 'Salad Bowl'. Using Pantone's Color Paper Picker (by Letraset) as a reference, the following comparisons were made on background leaf color:

<u>Variety</u>	<u>Pantone Reference No.</u>
Deep Red	364U
Prizehead	377U

The marginal red pigment distribution in 'Deep Red' is similar to 'Prizehead'. Both 'Prizehead' and 'Deep Red' have reddish-brown anthocyanin pigmentation that compares most similarly to 'Ruby'. The reddish-brown color of 'Deep Red' is more intense or of a darker hue, giving the variety a "deeper" red appearance than 'Prizehead'.

ASSIGNMENT

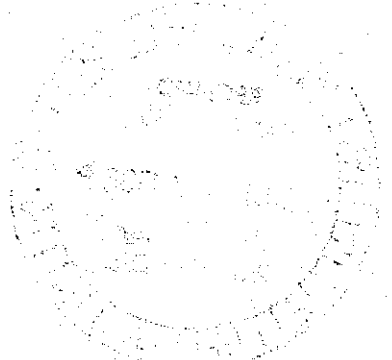
WHEREAS, Joseph Harris Company, Inc. ("Harris"), a corporation duly organized and existing under the laws of the State of Delaware is the owner of United States Plant Variety Protection Certificates listed in Exhibit A hereto; and

WHEREAS, in accordance with a Technology Transfer Agreement (the "Transfer Agreement") among Celanese Corporation ("Celanese"), Moran Seeds, Inc., Harris, CelPril Industries, Inc., Harris Moran International B.V. ("Sellers"), Virginia Chemicals, Inc., Les Produits Organiques du Santerre-Orsan S.A. ("Orsan"), HMS, CP Acquisition Inc., and Exploitiatiemaatschappij Wolwevershaven B.V., dated January 10, 1985, and a Purchase Agreement dated December 7, 1985, as amended, among Celanese, Sellers and Orsan, has purchased from Harris said United States Plant Variety Protection Certificates.

NOW, THEREFORE, in accordance with said Transfer Agreement and Purchase Agreement, Harris assigns to Orsan all of its rights, title and interest in and to said United States Plant Variety Protection Certificates.

Harris hereby authorizes Orsan to apply for and obtain the recordation of this Assignment. Harris agrees that it shall, without further consideration, promptly and duly cause to be performed such lawful acts and execution of any other documents as Orsan may reasonably request in order for Orsan to obtain the full benefits of this Assignment and to permit Orsan to be duly recorded in each office, bureau and tribunal in the appropriate jurisdiction as the registered owner or proprietor of each of the rights hereby assigned. Such instruments and documents shall include, without limitation, such applications, affidavits and other documents for filing in such jurisdictions as Orsan may from time to time reasonably request.

By these presents HMS does hereby accept this Assignment and authorize the recording thereof with the appropriate authorities aforesaid.



IN WITNESS WHEREOF, the parties have caused this Assignment to be executed by its proper officers thereunto duly authorized this 10th day of January, 1985.

JOSEPH HARRIS COMPANY, INC.,
Assignor

By: David A. Jenkins

David A. Jenkins
Vice President

LES PRODUITS ORGANIQUES DU
SANTERRE-ORSAN S.A.

Assignee

By: AL

Title: Attorney-in-fact

STATE OF New York
COUNTY OF New York

Before me, a Notary Public, in and for said County, personally appeared Patrice LeHodey who acknowledged that he is ~~Representative~~ of Les Produits Organiques du Santerre-Orsan S.A. the corporation which executed the foregoing instrument and who acknowledged he signed said instrument on behalf of said corporation by authority of its Board of Directors; and that said instrument is the free corporate act and deed of said Les Produits Organiques du Santerre-Orsan S.A.

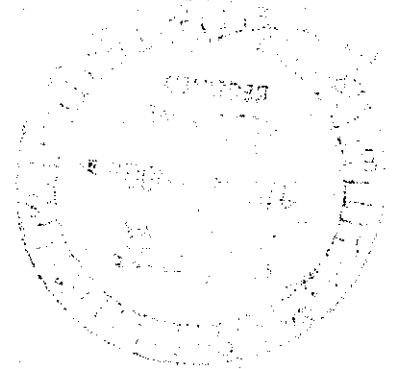
Sworn before me at New York this 10th day of January, 1985.

Alex C. Lengyel
NOTARY PUBLIC

(Notary Public)

My Commission Expires:

ALEX C. LENGYEL
Notary Public, State of New York
No. 31-4805123
Qualified in New York County
Commission Expires March 30, 1986



STATE OF New York
COUNTY OF New York

Before me, a Notary Public, in and for said County, personally appeared David Jenkins who acknowledged that he is Vice President of Joseph Harris Company, Inc., the corporation which executed the foregoing instrument and who acknowledged he signed said instrument on behalf of said corporation by authority of its Board of Directors; and that said instrument is the free corporate act and deed of said Joseph Harris Company, Inc.

Sworn before me at New York this 10th day
of January, 1985

Alex C. Lengyel
NOTARY PUBLIC

(Notary Public)

My Commission Expires:

ALEX C. LENGYEL
Notary Public, State of New York
No. 31-4805123
Qualified in New York County
Commission Expires March 30, 1986

DEED OF ASSIGNMENT

WHEREAS, Les Produits Organiques du Santerre - ORSAN (S.A.), a French corporation having a place of business at 16 rue Ballus, 75009 Paris, France (hereinafter referred to as "ASSIGNOR") owns and is using the Plant Variety Protection Certificates listed on the attached Exhibit for the indicated varieties which were awarded to ASSIGNOR by the Secretary of Agriculture on the indicated dates upon applications filed with the United States Plant Variety Protection Office; and

WHEREAS, Arisix (S.A.), a French corporation having a place of business at 61 rue des Belles Feuilles, 75116 Paris, France,

(hereinafter referred to as "ASSIGNEE") is desirous of acquiring the entire right, title and interest in and to the said varieties and Plant Variety Protection Certificates;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged, ASSIGNOR has sold, assigned and transferred, and by these presents does sell, assign and transfer unto said ASSIGNEE, and ASSIGNEE'S successors and assigns, all right, title and interest in and to the said varieties and said Plant Variety Protection Certificates in the United States including reissues, and including the right to enforce such rights against any past, present or future violation thereof, the said interest to be held and enjoyed by said ASSIGNEE as fully and exclusively as it would have been and enjoyed by said ASSIGNOR had this assignment and transfer not been made, to the full end and term of any right, title and interest assigned and transferred hereby.


ASSIGNOR further agrees that it will, without charge to said ASSIGNEE, but at ASSIGNEE'S expense, cooperate with ASSIGNEE in the assignment of said Certificates and the perfection of all rights thereto, execute, verify, acknowledge and deliver all such further papers and instruments of assignment and transfer

thereof, and will perform such other acts as ASSIGNEE lawfully may request, to obtain or maintain the listed Certificates and to vest title thereto in said ASSIGNEE or ASSIGNEE's successors and assigns.

IN TESTIMONY WHEREOF, an authorized representative of ASSIGNOR has hereunto signed its name to this assignment on the date indicated below.

Les Produits Organiques du Santerre
- ORSAN (S.A.)

Date: 1/11/95



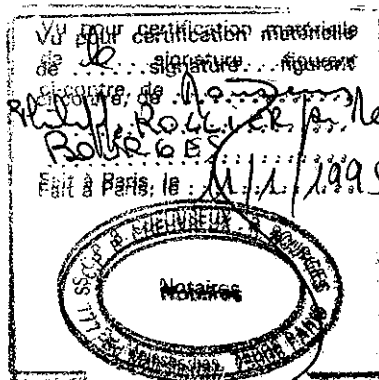
PHILIPPE ROLLIER
Print Name

PRESIDENT
Print Title

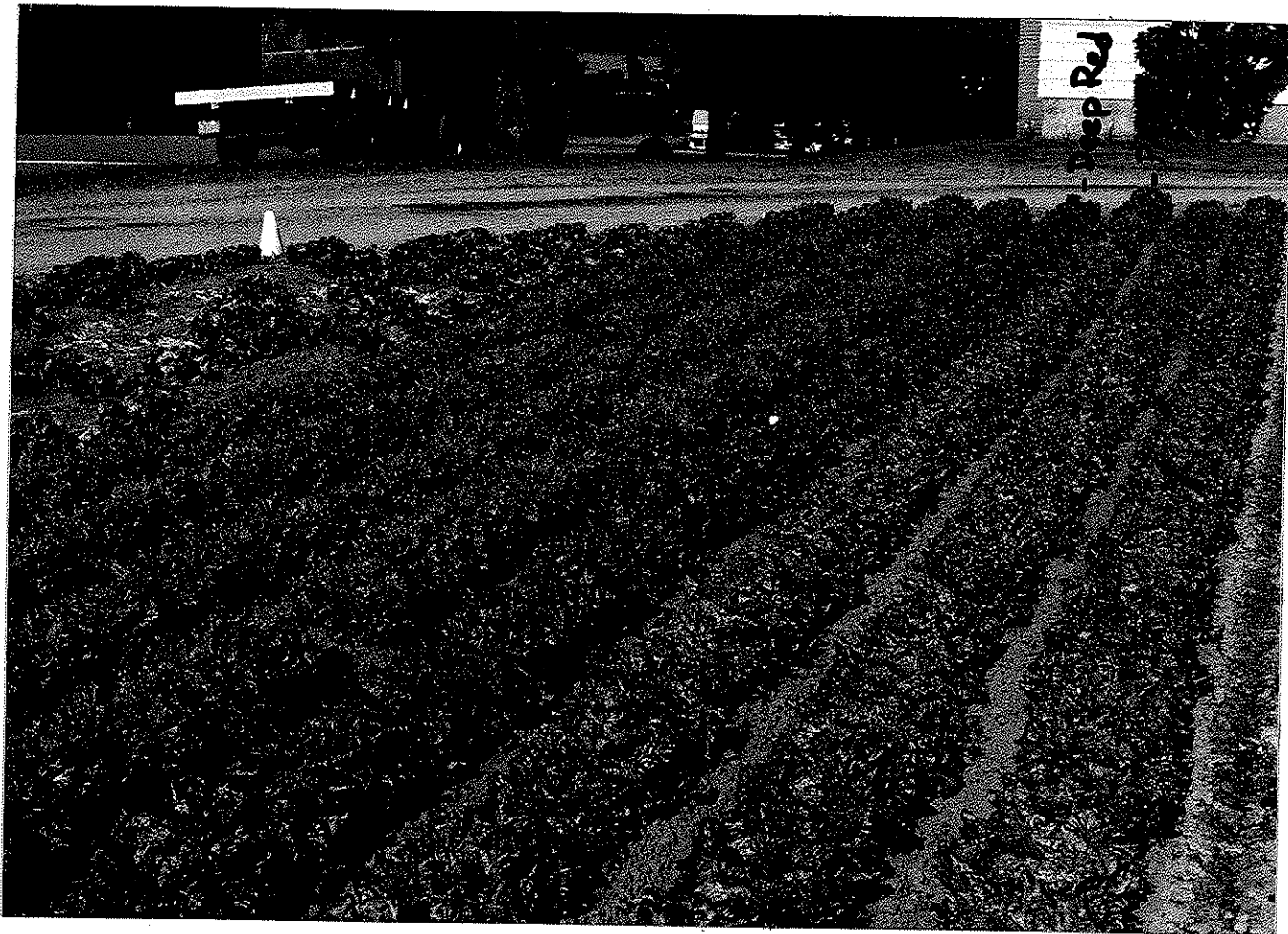
On this date, _____, 1993, before me, the undersigned notary public, personally appeared the above-named assignor, known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same.

(Notaire)

Seal/Stamp



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Photograph previously submitted with preliminary exhibits